DOCUMENT RESUME

ED 149 090 08 CE 014 326

TITLE	Professional Teacher Education Module Series. Present Information with Audio Recordings, Module C-26 of Category C--Instructional Execution.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	77
NOTE	52p.; For related documents see CE 011 532, CE 011 534, CE 014 295-355, CE 014 358 (student guide), CE 014 588 (resource person's guide), CE 014 532-539, and CE 014 589-591
AVAILABLE FROM	American Association for Vocational Instructional Materials (AAVIM), 120 Engineering Center, University of Georgia, Athens, Georgia 30602 ($2.90)
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	*Audio Equipment; Classroom Techniques; Educational Strategies; *Equipment Utilization; Individualized Curriculum; Instructional Aids; *Learning Activities; Learning Experience; Learning Modules; Performance Based Teacher Education; Phonograph Records; Phonotape Recordings; Post Secondary Education; Secondary Education; Tape Recorders; Tape Recordings; Teacher Education Curriculum; *Teaching Methods; *Teaching Skills; Teaching Techniques; *Vocational Education

ABSTRACT

This twenty-sixth in a series of twenty-nine learning modules on instructional execution is designed to give secondary and postsecondary vocational teachers help in developing the competencies needed to operate record players and tape recorders and to use this equipment effectively in presenting information. The terminal objective for the module is to present information with audio recordings in an actual school situation. Introductory sections relate the competencies dealt with here to others in the program and list both the enabling objectives for the five learning experiences and the resources required. Materials in the learning experiences include required reading, worksheets, performance checklists, and the teacher performance assessment form for use in evaluation of the terminal objective. (The modules on instructional execution are part of a larger series of 100 field-tested performance-based teacher education (PBTE) self-contained learning packages for use in preservice or inservice training of teachers in all occupational areas. Materials are designed for use by teachers, either on an individual or group basis, working under the direction of one or more resource persons/instructors.) (BM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED149090

MODULE

C-26

Present Information with Audio Recordings

MODULE C-26 OF CATEGORY C—INSTRUCTIONAL EXECUTION
PROFESSIONAL TEACHER EDUCATION MODULE SERIES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joel H. Magisos

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

The Center for Vocational Education
The Ohio State University

KEY PROGRAM STAFF:

James B. Hamilton, Program Director

Robert E. Norton, Associate Program Director

Glen E. Fardig, Specialist

Lois G. Harrington, Program Assistant

Karen M. Quinn, Program Assistant

Copyright 1977 by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Copyright is claimed until January 14, 1982. Thereafter all portions of this work covered by this copyright will be in the public domain.

This work was developed under a contract with Department of Health, Education, and Welfare, National Institute of Education. However, the opinions and other content do not necessarily reflect the position or policy of the Agency, and no official endorsement should be inferred.

1977

ISBN 0-914452-95-9

Published and distributed by the **American Association for Vocational Instructional Materials (AAVIM)**, 120 Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586.

CE 014 326

FOREWORD

This module is one of a series of 100 performance-based teacher education (PBTE) learning packages focusing upon specific professional competencies of vocational teachers. The competencies upon which these modules are based were identified and verified through research as being important to successful vocational teaching at both the secondary and post-secondary levels of instruction. The modules are suitable for the preparation of teachers in all occupational areas.

Each module provides learning experiences that integrate theory and application; each culminates with criterion referenced assessment of the teacher's performance of the specified competency. The materials are designed for use by individual or groups of teachers in training working under the direction and with the assistance of teacher educators acting as resource persons. Resource persons should be skilled in the teacher competency being developed and should be thoroughly oriented to PBTE concepts and procedures in using these materials.

The design of the materials provides considerable flexibility for planning and conducting performance-based preservice and inservice teacher preparation programs to meet a wide variety of individual needs and interests. The materials are intended for use by universities and colleges, state departments of education, post-secondary institutions, local education agencies, and others responsible for the professional development of vocational teachers. Further information about the use of the modules in teacher education programs is contained in three related documents: **Student Guide to Using Performance-Based Teacher Education Materials, Resource Person Guide to Using Performance-Based Teacher Education Materials** and **Guide to Implementation of Performance-Based Teacher Education.**

The PBTE curriculum packages are products of a sustained research and development effort by The Center's Program for Professional Development for Vocational Education. Many individuals, institutions, and agencies participated with The Center and have made contributions to the systematic development, testing, revision, and refinement of these very significant training materials. Over 40 teacher educators provided input in development of initial versions of the modules; over 2,000 teachers and 300 resource persons in 20 universities, colleges, and post-secondary institutions used the materials and provided feedback to The Center for revision and refinement.

Special recognition for major individual roles in the direction, development, coordination of testing, revision, and refinement of these materials is extended to the following program staff: James B. Hamilton, Program Director; Robert E. Norton, Associate Program Director; Glen E. Fardig, Specialist; Lois Harrington, Program Assistant; and Karen Quinn, Program Assistant. Recognition is also extended to Kristy Ross, Technical Assistant; Joan Jones, Technical Assistant; and Jean Wisenbaugh, Artist for their contributions to the final refinement of the materials. Contributions made by former program staff toward developmental versions of these materials are also acknowledged. Calvin J. Cotrell directed the vocational teacher competency research studies upon which these modules are based and also directed the curriculum development effort from 1971–1972. Curtis R. Finch provided leadership for the program from 1972–1974.

Appreciation is also extended to all those outside The Center (consultants, field site coordinators, teacher educators, teachers, and others) who contributed so generously in various phases of the total effort. Early versions of the materials were developed by The Center in cooperation with the vocational teacher education faculties at Oregon State University and at the University of Missouri-Columbia. Preliminary testing of the materials was conducted at Oregon State University, Temple University, and University of Missouri-Columbia.

Following preliminary testing, major revision of all materials was performed by Center Staff with the assistance of numerous consultants and visiting scholars from throughout the country.

Advanced testing of the materials was carried out with assistance of the vocational teacher educators and students of Central Washington State College; Colorado State University; Ferris State College, Michigan; Florida State University; Holland College, P.E.I., Canada; Oklahoma State University; Rutgers University; State University College at Buffalo; Temple University; University of Arizona; University of Michigan-Flint; University of Minnesota-Twin Cities; University of Nebraska-Lincoln; University of Northern Colorado; University of Pittsburgh; University of Tennessee; University of Vermont; and Utah State University.

The Center is grateful to the National Institute of Education for sponsorship of this PBTE curriculum development effort from 1972 through its completion. Appreciation is extended to the Bureau of Occupational and Adult Education of the U.S. Office of Education for their sponsorship of training and advanced testing of the materials at 10 sites under provisions of EPDA Part F, Section 553. Recognition of funding support of the advanced testing effort is also extended to Ferris State College, Holland College, Temple University, and the University of Michigan-Flint.

Robert E. Taylor
Director
The Center for Vocational Education

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University · 1960 Kenny Road · Columbus, Ohio 43210

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- Generating knowledge through research.
- Developing educational programs and products.
- Evaluating individual program needs and outcomes.
- Installing educational programs and products.
- Operating information systems and services.
- Conducting leadership development and training programs.

AAVIM

AMERICAN ASSOCIATION FOR VOCATIONAL INSTRUCTIONAL MATERIALS

Engineering Center
Athens, Georgia 30602

The American Association for Vocational Instructional Materials (AAVIM) is an interstate organization of universities, colleges and divisions of vocational education devoted to the improvement of teaching through better information and teaching aids.

INTRODUCTION

Audiovisual equipment and materials are versatile tools which can be used in a variety of ways and which help ensure that your lessons will be more effective and interesting. Record players and tape recorders are two audiovisual devices which can be put to good use in the vocational classroom or laboratory on a group or individual listening basis.

There are a number of advantages to using records and audiotapes: (1) the equipment is portable, generally simple to operate and readily available; (2) cassette recorders are quite inexpensive; (3) records are available through libraries at no cost, are inexpensive to purchase, and are easy to store and use; (4) audiotapes are inexpensive, are ideal for recording classroom activities or special events, and can be erased and reused; (5) students can be involved in the classroom activities by producing student-made audiotapes or operating the equipment during classroom presentations; and (6) students can use the equipment and materials on an individual basis. Records and audiotapes can be used at any point in the lesson (introduction, body, summary), and they can be very effectively used in combination with other types of media such as slides and filmstrips.

This module is designed to help you become competent in operating record players and tape recorders, and in using records and audiotapes to present information in the classroom or laboratory. It will also help you gain skill in determining when a record or an audiotape is the best (or one of the best) audiovisual device to use for a particular lesson.

ABOUT THIS MODULE

Objectives

Terminal Objective: In an actual school situation, present information with audio recordings. Your performance will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 47–49 (*Learning Experience V*).

Enabling Objectives:

1. After completing the required reading, set up and operate a record player (*Learning Experience I*).
2. After completing the required reading, present information with records in a practice situation (*Learning Experience II*).
3. After completing the required reading, set up and operate a reel-to-reel tape recorder (*Learning Experience III*).
4. After completing the required reading, present information with prerecorded tapes in a practice situation (*Learning Experience IV*).

Prerequisites

To complete this module, you must have competency in developing a lesson plan and in selecting student instructional materials. If you do not already have these competencies, meet with your resource person to determine what method you will use to gain these skills. One option is to complete the information and practice activities in the following modules:

- *Develop a Lesson Plan*, Module B–4
- *Select Student Instructional Materials*, Module B–5

Resources

A list of the outside resources which supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references in your occupational specialty, and (3) to get assistance in setting up activities with peers or observations of skilled teachers, if necessary. Your resource person may also be contacted if you have any difficulty with directions, or in assessing your progress at any time.

Learning Experience I

Required

A record player to set up and operate.

An educational record for use in setting up and operating the record player.

Optional

An audiovisual expert with whom you can discuss the uses and operation of record players.

An audiovisual equipment dealer whom you can visit or write to concerning record player equipment and supplies currently available.

Learning Experience II

Required

A record player to use during a lesson.

A record with which to present information in a lesson.

A resource person to role-play a student to whom you are presenting a lesson and to evaluate your performance in using records to present information.

Optional

A resource person to review the adequacy of your lesson plan.

A teacher skilled in presenting information with records whom you can observe.

Learning Experience III

Required

A tape recorder (with microphone) to set up and operate.

Two audiotapes, one prerecorded and one blank, for use in setting up and operating the tape recorder.

Optional

An audiovisual expert with whom you can discuss the uses and operation of tape recorders.

An audiovisual equipment dealer whom you can visit or write to concerning tape recorder equipment and supplies currently available.

Learning Experience IV

Required

A tape recorder to use during a lesson.

An audiotape with which to present information in a lesson.

A resource person to role-play a student to whom you are presenting a lesson and to evaluate your performance in using audiotapes to present information.

Optional

A resource person to review the adequacy of your lesson plan.

A teacher skilled in presenting information with audiotapes whom you can observe.

Learning Experience V

Required

An actual school situation in which you can present information with audio recordings.

A resource person to assess your competency in presenting information with audio recordings.

This module covers performance element numbers 128, 131 from Calvin J. Cotrell *et al.*, *Model Curricula for Vocational and Technical Education: Report No. V* (Columbus, OH: The Center for Vocational Education, The Ohio State University). The 384 elements in this document form the research base for all The Center's PBTE module development.

For information about the general organization of each module, general procedures for their use, and terminology which is common to all 100 modules, see About Using The Center's PBTE Modules on the inside back cover.

Learning Experience I

OVERVIEW

After completing the required reading, set up and operate a record player.

You will be reading the information sheet, Operating the Record Player, pp. 6–8.

You will be setting up and operating a record player by completing the exercises specified in the Record Player Worksheet, pp. 9–11.

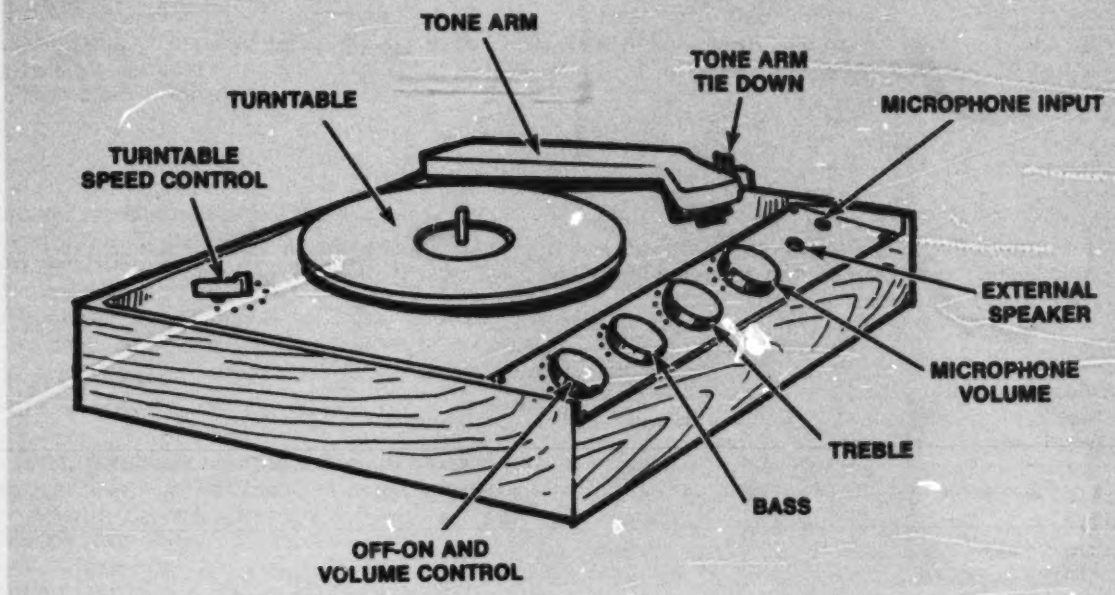
You will be evaluating your competency in setting up and operating a record player, using the Record Player Operation Checklist, pp. 13–14.

You may wish to locate and meet with a person with expertise in the area of audiovisuals for the purpose of discussing further the uses and operation of record players.

You may wish either to visit an audiovisual equipment dealer or to write to a dealer for catalogues describing the latest types of equipment and supplies available.

FIGURE 1

AUDIO EQUIPMENT: RECORD PLAYER



Activity

For information explaining how to select, set up and operate the equipment and materials necessary for a presentation which uses a record player, read the following information sheet:

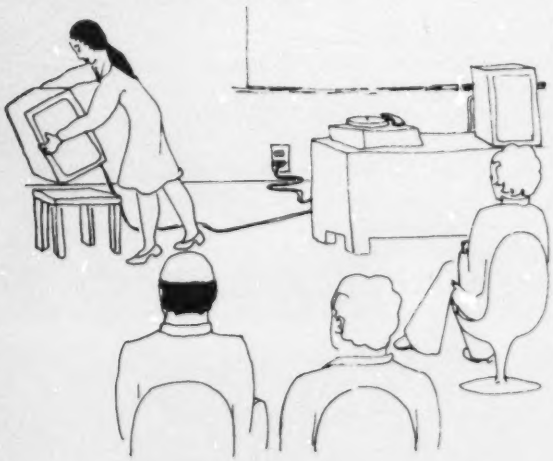
OPERATING THE RECORD PLAYER

Most people are very familiar with record players/stereos/phonographs, and have been operating various types for most of their lives. The types of record players you will encounter as a teacher may vary slightly from what you are used to, but you will still be able to apply what you already know to the operation of school machines.

Operation Procedures

First, check to see if the record you wish to play is monaural or stereophonic. Monaural records can be played on either monaural or stereophonic record players. Stereophonic records, however, **should not** be played on monaural record players because the record grooves can be damaged. Therefore, the record you are using will determine the type of machine you must have. Many school record players and educational records are monaural.

Once you have selected and obtained the proper record player, remove its cover. For some machines, the speaker(s) will be completely separate; for some the speaker(s) will be built into the cover; and for some the speaker(s) will be built into the record player. If the speaker(s) is separate, then it will need to be plugged into the speaker jacks (i.e., connector holes) on the record player. The record player and/or speakers should then be placed so that the audience will be able to hear well. For most classroom setups, the speakers need to be at the ear level of the listeners.



If there is just one speaker (monaural sound), place the speaker at the front of the room, slightly off center, and turned so that the sound is directed diagonally across the room. If there are two speakers, put them facing the audience about six to eight feet apart. (Once you have a record playing, you can properly place the speakers by moving them apart until the sound seems to come from a point between the two speakers.) Then, locate the power cord, plug it in, and turn on the amplifier and the turntable.

Now you are ready to prepare the record player to accommodate the record you wish to play. Check the record label to determine the record speed: 45 (revolutions per minute), 33 ⅓, 16, or 78 (the latter two speeds are nearly obsolete). Set the record speed selector on the record player accordingly. If you are playing a record and it sounds too fast or too slow, then your record speed selector is probably at the wrong setting.

Next, check your needle setting. A 78 record has "standard" grooves; 16, 33⅓ and 45 records have "microgrooves." If the school record player has a needle (or stylus) with two settings, you need to make sure that it is set for the type of grooves on the record you will be using. Using the wrong needle will damage the grooves on the record. The microgroove needle is so tiny that it will ride the bottom of a standard groove; a standard needle will ride the top edge of a microgroove. Present-day machines, however, have a needle that is suitable for all record speeds.

Most school record players do not have automatic record changers, but should you be using a record player that does, then record size becomes important. Records come in four sizes: 7", 10", 12" or 16". Most 33⅓ records are 12"; most 45 records are 7"; and you will probably not be using 10" or 16" records. You must set the record size selector on the record player to the proper size in order for the automatic record changer to operate correctly. If, for example, you are using a 12" record and you set the selector at 7", each time a record drops down, the needle will be placed automatically five inches in from the outer edge of the record.

If the record you will be using is 45, then it will have a larger center hole. Thus, it will not fit properly on the record player spindle without a special adaptor for the spindle. Some turntables have the 45 adaptor built into the turntable; by lifting the adaptor and turning it, the 45 records can be played; by turning it and lowering it, it becomes flush with the turntable so 78 and 33⅓ records can be played. Other machines have separate adaptors that fit over the regular spindle. There are also adaptors that fit inside the hole of 45 records so they can be played on any machine without having to be concerned as to whether the machine has an adaptor or not.

Once all the necessary adjustments have been made to your settings, pick up the record (by its edges only) and place it on the turntable. Release the tone arm and place it gently on the record in the run-in groove near the record edge. Adjust the volume control and the tone (or treble and bass) control(s).

When the record is over (unless the shut-off is automatic), gently and steadily remove the tone arm and relock it into place. Remove the record, and return it to its dust jacket. Unplug the power cord (and speaker cords if necessary) and return the cord(s) to their storage area. Never wrap the cord around and/or under the turntable as this can damage it. Finally, replace the cover on the machine.

Maintenance

Most of the maintenance tasks related to the record player need to be done by an expert repairperson. The primary responsibility of the teacher in the maintenance area is to treat the record player carefully. Avoid jarring it or allowing it to bump into things while it is being carried. Do not forcibly lift the tone arm while it is locked and do not carry the record player around by its carrying handle while the tone arm is not locked. It is also important that you make sure that worn or damaged needles are replaced; always set the needle onto the record gently and lift it off the same way; and make sure the needle is free of dust by blowing the dust off, not by brushing it off with a finger.

You are also responsible for tending to the condition of the records. Records should always be kept in their dust jackets when they are not in use. They should never be handled in the area of their grooves. They should always be stored vertically, away from excessive heat or dampness. The record surface should be kept clean. Special silicone cloths and antistatic sprays are available for this purpose. If you do not have either of those items, you can gently wipe the grooves in a circular motion using a soft cloth which has been dipped in cool water and rung out until it is almost dry.

Materials

There are a number of sources available for locating educational records. These include—

- Teachers' professional organizations
- Colleagues
- Organizations such as Audio Education, Educational Recording Services, and the American Library Association
- Curriculum guides
- Libraries and school or university media centers
- Record companies
- Journals and periodicals
- *Schwann-2 Catalog*
  W. Schwann Inc.
  Boston, Massachusetts (monthly)
- *Educators Guide to Free Tapes, Scripts, and Transcriptions*
  Educators Progress Service
  Randolf, Wisconsin
- *AV Instructional Materials Manual*
  James W. Brown & Richard B. Lewis, Eds.
  McGraw-Hill
  New York, New York
- *Bluebook of Audio Visual Materials*
  Educational Screen and Audiovisual Guide
  Chicago, Illinois (annual)
- *Teacher's Record Catalog*
  Harrison Catalogs
  New York, New York (annual)

The following worksheet is designed to help you become competent in operating the record player. No one need see this worksheet unless you choose to show it to them, so do not be reluctant to record what actually happens, right or wrong. The sheet is not intended to show proof that you did everything perfectly the first time. It is intended to help you to organize your knowledge about the operation of the record player, to help you apply that knowledge to actual equipment, to point out to you where you have gaps in your knowledge, and to help you determine how to fill those gaps. Completed thoughtfully and thoroughly, this sheet should make an excellent reference for you in the future. Read the directions carefully and then complete each of the 14 exercises.

RECORD PLAYER WORKSHEET

Directions: Locate a record player and an educational record. Arrange for the equipment and material to be placed in the room in which you will be working with them. Complete each of the following exercises using the actual equipment and material. Each exercise requires a short response. Please respond fully, but briefly, and make sure you respond to all parts of each item. Do **not** answer simply YES or NO; explain your responses. Should you have any difficulty with an exercise, make a note of that problem.

1. What is the make and model of the record player with which you are working?

2. Is there an operating manual? Does it contain any information that is different from, or was not covered in, the information sheet? If so, briefly describe that information.

3. Open the cover of the record player and remove it if necessary. Use the following checklist to check off the types of controls available on the record player you are working with:

Speed Settings
____33⅓ rpm
____16 rpm
____78 rpm
____45 rpm

Needle Settings
____standard (78 rpm)
____microgroove

Automatic Changer
____No
____Yes
____7″
____10″
____12″
____16″

45 rpm Adaptor
____No
____Yes

4. Describe how to set the speed control, how to change needle settings (if applicable), how to adjust for different sized records (if applicable), and what type of 45 adaptor is provided for the record player (if applicable).

5. Check the record you will be using. At what speed has it been recorded? What needle setting does it require? What size is it? Set the record player controls to fit the characteristics of the record.

6. Based on the characteristics of the record, can it be played on your record player? Why or why not? (If not, locate either another record or another record player.)

7. Describe the type of speaker(s): one or two speakers? . . . part of the cover, built into the record player, or separate?

8. Locate the power cord and plug the record player into an outlet. If the speakers are separate, plug them into the speaker jacks on the record player. Describe the location of the stored power cord and of the speaker jacks.

9. Turn the machine on. Describe the type of control used to turn the machine on. What other functions, if any, are operated with this control? Does this control turn on just the machine, or does the turntable begin to rotate also? If not, how do you turn the turntable on?

10. Place the record on the turntable, turn the turntable on, release the tone arm, and place it gently on the edge of the record. Describe the procedure for releasing the tone arm.

11. Adjust the tone and volume. Describe the controls used to make these adjustments, and what each control does.

12. If there are two speakers, move them apart until the sound seems to come from a point between the two speakers. Describe the proper location of the speakers and any controls on the machine which control the amount of sound coming from each speaker.

13. Assume you have a class of 20 students. Arrange the seating, the record player and the speakers as you would if you were using the record player to present information to that group of 20. Start the record playing and make any necessary adjustments to volume, tone, etc. **NOTE**: At this point, move to the explanation of Part I in the Feedback that follows.

14. Remove the record and replace the record and the record player in their cases. Then move to the explanation of Part II in the Feedback that follows.

Part I: After you have completed the first 13 items on the worksheet, use Part I of the Record Player Operation Checklist, p. 13, to evaluate your work. **Part II:** After you have completed item 14, use Part II of the Record Player Operation Checklist, pp. 13–14, to evaluate your work.

NOTES

RECORD PLAYER OPERATION CHECKLIST

Name _____

Date _____

Resource Person _____

Directions: Place an X in the YES or NO box to indicate whether each item was performed successfully or not.

Part I	**Yes**	**No**
When you were handling the record player, you remembered to:		
1. handle the machine without jarring it or bumping it into anything	☐	☐
2. release the tone arm before trying to lift it.	☐	☐
3. make sure the tone arm was locked whenever you were moving the machine around.	☐	☐
4. set the needle gently and steadily onto the record.	☐	☐
5. free the needle of dust by gently blowing the dust off.	☐	☐
When you were handling the record, you remembered to:		
6. pick up the record by its edges only.	☐	☐
7. keep the record surface clean by using a soft damp cloth or silicone cloth.	☐	☐
The record player, speakers, and room are adjusted and arranged for the group of 20 so that:		
8. the record player is at the front of the room.	☐	☐
9. the speakers are at the ear level of the members of the audience.	☐	☐
10. if there is one speaker, it is placed slightly off-center so the sound is directed diagonally across the room; if there are two speakers, they are placed so that the sound seems to come from between them.	☐	☐
The sound:		
11. is clear and undistorted.	☐	☐
12. is loud enough to be heard by all members of the audience.	☐	☐
13. has a pleasant tone	☐	☐

(Return to the worksheet and complete item #14.)

Part II		
In returning the record and record player to their cases, you:		
1. lifted the tone arm gently from the record.	☐	☐
2. locked the tone arm in place.	☐	☐
3. removed the record, handling only the edges.	☐	☐

	Yes	No
4. returned all controls to their original or "off" positions.	☐	☐
5. unplugged the machine and speaker cords, if necessary.	☐	☐
6. returned cords to their storage areas.	☐	☐
7. did not wrap any cords around or under the turntable.	☐	☐

LEVEL OF PERFORMANCE: All items should receive YES responses. If any item receives a NO response, correct that condition using the actual equipment and materials. If you have trouble correcting the condition, check with your resource person or someone with expertise in the area of audiovisuals.

You may wish to contact your resource person, or someone else you or your resource person may know of with expertise in the area of audiovisuals. This person could discuss with you special techniques or helpful hints that can be of use to you when you work with the record player.

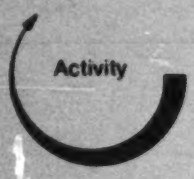
You may wish to check into the latest advances in record players. You may also wish to identify educational records that are currently available. If there is an audiovisual equipment dealership in your vicinity, you may wish to visit them and look over their equipment, or to make arrangements to have one of their salespersons talk to you. If you cannot make such a visit, you could write to one or more of the major manufacturers of educational records and of record players, asking for catalogues.

Learning Experience II

OVERVIEW

After completing the required reading, present information with records in a practice situation.

You will be reading the information sheet, Using the Record Player as an Instructional Device, pp. 17–19.



You will be selecting an objective in your occupational specialty that lends itself to the use of a record.

You will be selecting, modifying, or developing a lesson plan designed to achieve that objective using a record(s).

You may wish to have your resource person review the adequacy of your plan.

You will be obtaining the necessary record(s), and making arrangements to secure the necessary equipment.

You may wish to arrange through your resource person to visit a classroom in which a teacher experienced in the use of records is presenting information using a record and a record player.

You will be presenting your lesson to your resource person.

Your competency in presenting information with record(s) and a record player will be evaluated by your resource person, using the Presentation Checklist: Records, pp. 21–22.

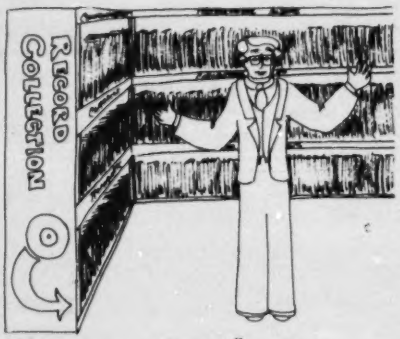
Activity

For information describing the general and specific uses of records and record players in presenting information, and explaining the procedures for their classroom use, read the following information sheet:

USING THE RECORD PLAYER AS AN INSTRUCTIONAL DEVICE

Advantages

The advantages associated with the use of records and record players chiefly concern the ready availability of both equipment and materials. Record players are common equipment both at home and at school, so it is usually a simple task to have one available when you need it. Records, too, are usually readily available through the school or the local library. If not, they are generally quite inexpensive to purchase. In certain fields or areas, there is a wide variety of records available on the market. Therefore, it should be a fairly simple task to obtain both equipment and material and to schedule their use at the time they are needed.



The record player is quite easy to operate, and the records are easy to store and use. Records can be started or stopped at any point according to the needs of the lesson or the students. If a record has more than one program or presentation on it, it is easy to locate the program.

Disadvantages

In spite of the fact that a large variety of records is available, not many of these relate specifically to vocational education. Perhaps in leadership training programs, a record containing famous speeches would be helpful; or in business office education, records containing dictation exercises are often used; or in any vocational service area, filmstrip/record combinations can be used. However, since the appearance of the cassette recorder, cassette tapes can serve those same functions with far more flexibility and ease.

If a record is not treated carefully, it can be easily damaged. Placed too near heat, it can warp. Stacked in a pile, it can bend. Sat upon, it can break. Should a needle slip across its surface, the resulting scratch can ruin the sound.

Finally, records must be purchased, rented, or borrowed; they are not usually produced locally or teacher-made. Thus, you must rely on material which may or may not meet your specific needs.

Classroom Procedures

As with any other type of media, the first step in your classroom procedure for media-use is to establish a lesson objective(s). Once you have established what it is that you want to accomplish, you can then determine what type(s) of media can best serve that purpose. If you determine that listening to material on a record will help to meet your objective(s), then you can attempt to locate such a record.

Any record you consider must be evaluated in terms of its ability to (1) meet the lesson objective(s), (2) reach students at their own levels, and (3) motivate and interest students. The recorded material must also be well organized,clear, logical, error free, and up to date, and have good sound quality.

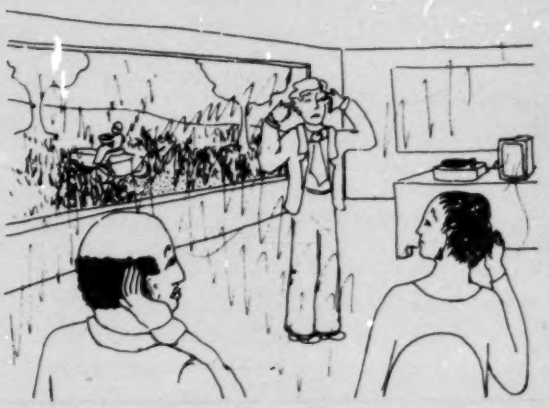
If you can locate an appropriate record which meets those criteria, you can then begin to plan how it will fit into your lesson. Your lesson plan needs to answer the following types of questions.

- At what point in the lesson will the record be played?
- How are you going to prepare students for the record?
- Are you going to play the record straight through and discuss it afterwards? . . . stop periodically for discussion?
- Is the record designed to be used with slides or a filmstrip? . . . will you use it that way?
- What method of summary will you use?
- How are you going to evaluate what the students have learned from the record?
- In what way(s) are you going to get feedback on the students' evaluation of the record?
- Are there any follow-up activities you can plan which grow out of the experience of listening to the record?

Some records are accompanied by teachers' guides. Before you use such materials, either with a class or for individual study purposes, you need to make sure that they do, in fact, meet the needs of your lesson objectives and students. The written materials accompanying records can be of value in helping you to prepare your own study guides or worksheets. They can be used in preparing students for the listening activity, as a basis for class discussion, as a follow-up activity, or for directing individual listening activities.

In some cases, the record may be accompanied by a script of the recorded material. Scripts can be very helpful to you in lesson planning. With the content available to you in written form, you can easily determine how to alert students to key points or what types of questions to ask to help them get the most out of the listening session.

Before using the record player in the classroom, you should have (1) made sure in advance that you will have access to the record player and the record you have selected on the day and at the time when you need them; (2) arranged the physical setting of the room so that all students will be able to hear clearly; (3) prechecked the material and equipment (adjusted the record player settings to fit the record, e.g., speed, needle, etc.), and preset the volume and tone if necessary; and (4) tried to eliminate any distracting noises. For example, if the day is hot, and your windows must be open for the room to be comfortable, and the janitor is mowing the lawn right under your open window, it is best either to forget about playing the record or to move to another room. Trying to compete with a loud noise usually doesn't work very well.



When you reach the point in your lesson at which the record is to be played, prepare the students for the record. You can do this by raising questions, pointing out key items to listen for, discussing new vocabulary, indicating errors or omissions contained on the record, passing out study guides, etc. Then, play the record according to your lesson plans.

Unless the equipment is in the way, it is best to wait until after you have completed the lesson (discussion, evaluation, summarization, follow-up, etc.) to put the equipment away. In this way, the operation of the equipment does not interfere with the flow of the lesson.

At some point prior to giving your students learning activities requiring them to listen, they need to be given instruction on how to listen. This can be handled as part of a lesson early in the year, but it should be reviewed briefly before each listening activity. Ours is a world full of sounds, particularly loud sounds. Rock bands, live and recorded, blast away at young people's ear drums. The television and radio and stereo perpetually assault our ears. Traffic, planes flying overhead, and other elements of our modern, technological society create a continuous undercurrent of noise.

As a result of this overdose of sound, people today are much more adept at blocking out extraneous sounds. Unfortunately, this results in our also blocking out sounds that we should be hearing. You can probably think of a dozen occasions, just offhand, in which a person who was viewing

television or listening to the radio (or even reading a book) did not hear you speaking to him/her at all.

Therefore, the fact that we have ears doesn't mean that the ability to listen is already developed; it must be taught. Studects must be made aware that they need to listen quietly, carefully, and with an open mind. They need to listen to the words that are being said, and the tone of voice in which the words are being said. They need to take note of what the speaker says he/she is going to be talking about, and then to relate that to what he/she actually says.

They need to listen to sections, not just one word at a time. Students sometimes tend to try to take notes word for word. Doing that can cause them to miss whole sentences while they are writing. In addition, the speaker is not trying to communicate words; he/she is trying to communicate ideas. As the speaker talks, they should try to create mental pictures of what he/she is saying. When they can summarize a key point in their own words, they should make a written note of that point.

Students need also to be critical listaners. It is not enough to absorb what the speaker is saying. Students need to analyze and evaluate what they hear in terms of what they already know. If a speaker makes a questionable point or asserts something to be true without showing proof, students should make a note of those points so they can be discussed or followed up on later.

If you as a teacher work on listening skills with students, if you are familiar enough with the recorded material to prepare students adequately in terms of what to listen for in a particular listening activity, and if the recorded information contributes toward accomplishing the objectives, then listening to a record can be a valuable learning experience.

Select a student performance objective in your occupational specialty which could be achieved, at least partially, by using a record. (In a real world situation, you start with an objective and then select the most appropriate materials and/or teaching methods. In this practice situation, however, you need to select an objective that lends itself to using a record.)

Prepare a detailed lesson plan which includes the use of a record. In your plan, explain what record(s) will be needed, how it will be used, and when. Instead of developing a lesson plan, you may select a lesson plan that you have developed previously, and adapt that plan so that it includes the use of a record.

You may wish to have your resource person review the adequacy of your plan. He/she could use the Teacher Performance Assessment Form in Module B–4, *Develop a Lesson Plan*, as a guide.

Based on your lesson plan, select and obtain the record(s) you will need to make your presentation. Also, arrange to have the appropriate type of record player (based on the type of record you will be using) available when you make your presentation.

Before presenting your lesson, you may wish to arrange through your resource person to observe a lesson involving the use of a record which is being presented by a vocational teacher in your service area who is experienced in using this technique.

In a simulated classroom situation, present your lesson to your resource person. Your resource person will serve two functions: (1) he/she will role-play a student to whom you are presenting the lesson, and (2) he/she will evaluate your performance.

Give your resource person the Presentation Checklist: Records, pp. 21–22, before making your presentation in order to ensure that he/she knows what to look for in your lesson.

PRESENTATION CHECKLIST: RECORDS

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Name _____

Date _____

Resource Person _____

	LEVEL OF PERFORMANCE			
	N/A	No	Partial	Full
The teacher:				
1. arranged the physical setting in advance in a way that would ensure that all students could hear the presentation clearly	☐	☐	☐	☐
2. had equipment and materials assembled in advance	☐	☐	☐	☐
3. set up equipment and placed record on the turntable according to manufacturer's recommendations	☐	☐	☐	☐
4. prechecked the equipment and preset tone, volume, etc.	☐	☐	☐	☐
5. adjusted the sound so that it met the following criteria:				
a. clear and undistorted	☐	☐	☐	☐
b. loud enough to be heard by all the class	☐	☐	☐	☐
c. pleasant tone	☐	☐	☐	☐
6. used a record which met the following criteria:				
a. content was at students' comprehension level	☐	☐	☐	☐
b. record aided in meeting the objective(s) of the lesson	☐	☐	☐	☐
c. content was motivational and interesting	☐	☐	☐	☐
d. content was of good quality (e.g., well organized, clear, logical, error free, and up to date)	☐	☐	☐	☐
e. recorded sound was of good quality	☐	☐	☐	☐
f. record was in good condition	☐	☐	☐	☐
7. reviewed listening skills with students before playing the record.	☐	☐	☐	☐
8. prepared students adequately for the record (e.g., raised key questions, defined terms, etc.)	☐	☐	☐	☐
9. presented the record at a logical point in the lesson	☐	☐	☐	☐
10. placed the needle at the proper point on the record on the first try without allowing the needle to scratch the record	☐	☐	☐	☐

	N/A	No	Partial	Full
11. removed the tone arm from the record as soon as the record (or record selection) was finished without allowing the needle to scratch the record	☐	☐	☐	☐
12. summarized (or had class members summarize) the record content	☐	☐	☐	☐
13. obtained student feedback on students' understanding of the record	☐	☐	☐	☐
14. obtained student feedback on students' evaluation of the record.	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive FULL, or N/A responses. If any item receives a NO, or PARTIAL response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

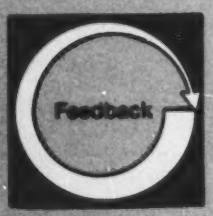
Learning Experience III

OVERVIEW

After completing the required reading, set up and operate a reel-to-reel tape recorder.

You will be reading the information sheet, Operating the Tape Recorder, pp. 24–29.

You will be setting up and operating a reel-to-reel tape recorder by completing the exercises specified in the Tape Recorder Worksheet, pp. 31–34.



You will be evaluating your competency in setting up and operating a reel-to-reel tape recorder, using the Tape Recorder Operation Checklist, pp. 35–36.

You may wish to locate and meet with a person with expertise in the area of audiovisuals for the purpose of discussing further the uses and operation of tape recorders.

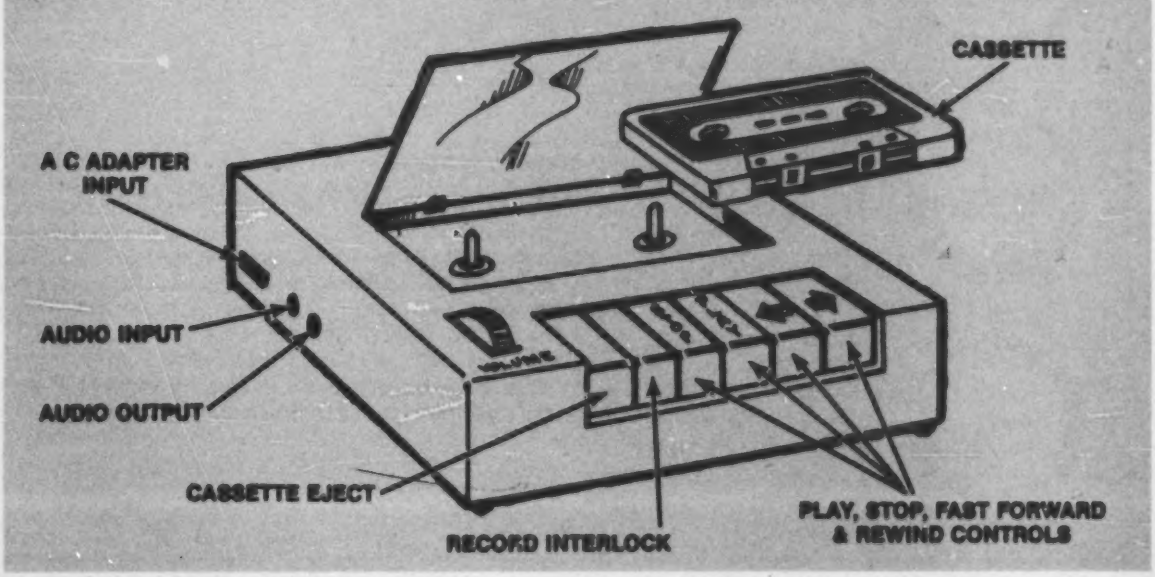
You may wish to either visit an audiovisual equipment dealer or write to a dealer for catalogues describing the latest types of equipment and educational audiotapes available.

FIGURE 2

AUDIOTAPE EQUIPMENT: REEL-TO-REEL TAPE RECORDER

FIGURE 3

AUDIOTAPE EQUIPMENT: CASSETTE TAPE RECORDER



Activity

For information explaining how to select, set up and operate the equipment and materials necessary for a presentation which uses a tape recorder, read the following information sheet:

OPERATING THE TAPE RECORDER

You are probably familiar with three types of tape recorders: reel-to-reel, cassette, and cartridge. The eight-track tape recorders which are made for use in automobiles are an example of the cartridge type. Since you will probably not be working with the cartridge type in a school situation because of its limitations,[1] the cartridge recorder will not be discussed directly in this information sheet; however, the principles discussed here will generally apply to cartridge recorders. The two tape recorders pictured in Figures 2 and 3, the reel-to-reel and the cassette, are the machines which you will most likely be using in your classroom or laboratory.

Operating Principles

Tape recorders use a plastic-base tape coated on one side (the dull side) with iron oxide. When set to record, the recorder translates the sounds being picked up by the microphone into magnetic impulses. These impulses are then recorded onto the magnetic tape; the actual process involves the rearrangement of the iron oxide particles into patterns. When the tape is played back, the recorder reads the magnetic patterns on the tape, and translates these back into recognizable sounds.

Tape Characteristics

A cassette tape is a reel-to-reel arrangement in a plastic case. The cassette is merely slipped into the recorder with the open end facing the recording head, and you're ready to go. Cassette tapes can be recorded on both sides, and are usually marked "Side 1" and "Side 2." In the very center of each side is a little window through which you can see how much tape is on each reel. On the window, there will be markings (as on a ruler) so that once you locate a particular program or item on the tape, you can relocate it (approximately) in the future.

Since cassette recorders operate at only one speed, the recording time a particular tape will give you can be determined by the length of the tape in feet. You can buy cassette tapes which will give you 15 minutes of playing time on each side, 30 minutes each side, 45 minutes each side, 60 minutes each side, or more. However, because the plastic case is always the same size, the longer the tape, the thinner it must be (after a point) to fit in the case. Generally speaking, the thinner the tape, the poorer the quality of the reproduced sound.

The tape for a reel-to-reel recorder comes, obviously, on a reel. Unlike the cassette, placing this reel onto the recorder properly and threading it accurately involves a little know-how. This will be discussed later in the Operating Procedures section.

Since reel-to-reel recorders allow you to record at more than one speed, the recording time you will have will be determined by two factors: the length of the tape in feet, and the recording speed. Light-weight, portable reel-to-reel recorders may give you a choice of only two speeds. Expensive, high quality recorders may give you five speeds or more. Most school recorders will have three speeds: 1⅞ inches per second (ips), 3¾ ips and 7½

[1]The playback and recording equipment are often separate. The tape is a continuous loop played on equipment with no Fast Forward or Rewind controls; thus, when you turn on the machine, you have no control over where the tape will start playing.

ips. "Ips," or inches per second, refers to the speed at which the tape travels past the recording head. The following chart represents the relationship between reel size, tape length, tape speed, and recording time:

REEL SIZE	TAPE LENGTH	MINUTES OF RECORDING TIME		
		1⅞ ips	3¾ ips	7½ ips
3"	150'	15	7½	3¾
4"	300'	30	15	7½
5"	600'	60	30	15
5"	900'	90	45	22½
7"	1200'	120	60	30
7"	1800'	180	90	45
10½"	2400'	240	120	60
10½"	3600'	360	180	90

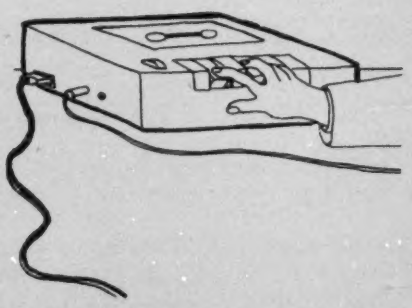
Knowing these relationships will help you know what size tape you will need to have in order to record a lesson or program of a particular length.

Recorder Characteristics

Different recorders are equipped to record and play different numbers of **tracks:** single or full track, dual or half-track, and quarter track. A single track machine records on the full width of the tape. A dual track machine records two tracks side by side. This gives you more tape space since you can record through on one track, flip the tape to the other side, and record back on the other track. A quarter track has two sets of dual tracks for recording stereo. The number of tracks is important if you are working with a prerecorded tape. If the tape was recorded on a machine with a different number of tracks than the one you are now using, the tape will not play back properly. For example, if you try to play a tape which was recorded on a dual track machine on a machine for single track, you will hear both tracks simultaneously.

All tape recorders have a number of **controls,** either separate buttons, or knobs or dials with multiple functions combined. Both cassette and reel-to-reel recorders will have some control for playing the tape (PLAY), some control for rapidly rewinding the tape back to its original reel (REW or RW), some control for rapidly advancing the tape to locate a particular program or lesson (FAST FORWARD or FF), some control for stopping the tape (STOP), some control for recording (RECORD), and some control for adjusting the volume (VOLUME or VOL).

Some machines may have a control to adjust the TONE, also. The operation of these controls is pretty straightforward, but there are two procedures that need special mention: (1) when the tape is moving, before you change operations (e.g., from REWIND to PLAY), you must first use the STOP control to stop the tape or you can damage it; and (2) to record, you have to engage two controls simultaneously (RECORD and PLAY). Cassette recorders will usually have an additional control marked EJECT for removing the cassette tape from the machine.



There are also a number of little holes in the recorder, usually on the side of the machine. These are **jacks** into which you plug the power cord (AC INPUT), and the microphone (MIC). Different machines will have additional jacks for monitoring phone calls, or for recording tapes directly from other recorders or from record players using a patch cord (see section on Recording for further information on the use of patch cords).

Two additional features found on most larger reel-to-reel recorders and on some cassette recorders are VU (volume units) Meter, and the Program Indicator. The **VU Meter** looks like a tiny speedometer. Its purpose is to indicate the sound level when you are recording. The left side will be marked "Normal" or be colored white. The right side will be marked "Over" or be colored red or some other color. Set the volume control so that the needle stays on the left-hand side, with only an occasional bounce to the right, when you are recording.

A variation of this device is the **Neon Tube Indicator.** This is a circle divided into two sections, each of which can light up or glow. In this case, when the volume is set correctly, one half should be lit up most of the time with only an occasional flicker of light from the other half. Cassette recorders do not normally have either of these devices; however, some cassette recorders will have an automatic recording level device which self-adjusts to fit the conditions.

The **Program Indicator** looks like the odometer (mileage gauge) on a car. When you start a tape, you can set it at "0" and it will then gauge how far the tape runs. The advantage of this is that if you put three lessons on a tape, you can make a note of the number indicated by the gauge when you start and finish each lesson. Then, if you want to use just the second lesson, you can locate it easily using the gauge.

Reel-to-reel recorders will have a **Tape Speed Indicator.** As mentioned earlier, the machines you will be working with will probably have just three speeds: 1⅞, 3¾, and 7½ ips. The rate of speed determines, in part, the quality of the recording that will be produced. If a tape is going 7½ ips, that means that you are using more space to record a ten-minute speech than if the tape were going 1⅞ ips. More space used results in better quality. It is best to use higher speeds to record presentations which you want to have high quality (music or a guest speaker, for example), and lower speeds if you must economize on the number of tapes you use or if you want to get a long lesson on a single tape.

Operating Procedures

Whether you are working with a reel-to-reel or cassette recorder, and whether you are playing back or recording, the first task you need to complete is to locate the power cord and plug it into the jack on the recorder. Before plugging the other end of the power cord into the wall outlet, you need to place the recorder in the proper location. If you are going to be playing back a tape, the recorder needs to be placed so that the speaker(s) are directing the sound toward the listeners. (See the information sheet, Operating the Record Player, p. 7 for information on speaker placement.) If you are going to be recording, the recorder needs to be placed so that the microphones are located so as to get the best sound reception (see the Recording section for information on microphone placement).

Threading the reel-to-reel recorder.—If you are working with a new reel or unused tape, it will be sealed with a piece of tape. Remove the seal, unwind, remove and discard one full turn of tape. This will ensure that the tape you use is not damaged at the lead-in. Turn the machine on and let it warm up a moment. Most machines thread from left to right, but if you want to make sure, turn the machine on so that it is running forward and look to see which of the two tape spindles is **not** moving. Put the full tape on that spindle. On the other spindle, place an empty reel of the same size as the full one.

Next, locate the recording head below the two reels. In some machines, you will have to open a door at the lower edge of the machine to locate it. Thread the machine so that the dull side of the tape is against the recording head. Some machines have an automatic shut-off feature which will turn off the recorder as soon as there is no longer any pressure on it from the tape going past. If the machine has such a feature, you will need to make sure the tape is threaded so that it is applying pressure properly to it, or the machine will not run.

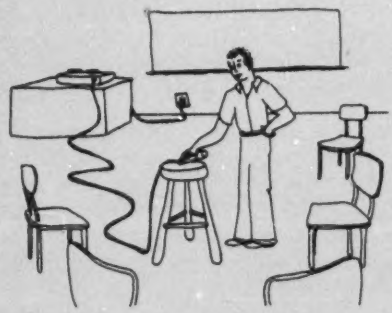
Finally, engage the end of the tape in the take-up (empty) reel. Most reels have a slot in the hub. Put the tape into the slot in a position such that the end of the tape slants upward and sticks up out of the slot. Hold the end of the tape secure and rotate both reels slightly by hand until the tape is held firmly on the reel.

Playing a prerecorded tape.—Once you have threaded the reel-to-reel tape, or inserted the cassette tape into the machine, you need complete only a few simple steps before you are ready to play the tape: (1) adjust the volume, (2) adjust the tone, (3) set the speed control (if there is one) to the proper speed for the tape you are using, (4) use the FF or RW controls to locate the starting point of the program or lesson you wish to play, and (5) engage the PLAY control.

Recording a new program or item.—You do not need a blank tape to record a program. A tape which already has been used can be reused. When the recorder is set on RECORD, the previous program will be erased as the new program is being recorded. There is one exception. On the back edge of the plastic cassette are two tabs. If these tabs are removed, when that tape is placed in a recorder, the recorder will not operate on RECORD. Thus, that material cannot be erased. Should you desire to prevent a key tape from being accidentally erased, you should remove the tabs. If you

decide later that you no longer need that recording, you can place tape over the holes, and then the tape can be re-recorded.

The first step in recording is to position the microphone(s) properly. Some microphones will be separate and have to be plugged into the MIC or AUDIO INPUT jack. On some new cassette recorders, the microphone is built into the recorder. There are basically three kinds of separate microphones: unidirectional, bidirectional, and omnidirectional. The unidirectional mike will pick up sound from only one direction; the bidirectional mike will pick up sounds from the front and the back (e.g., the speaker and the audience); the omnidirectional mike picks up sound from all directions. You will most likely be working with the latter type.



Microphones should be placed at least four to six feet away from any hard surfaces or corners since these reflect sound and cause echoes and reverberations. They should also be used in a room where there are not a lot of items which absorb sound (drapes, rugs, etc.) since these will cause the tape to sound as though it was recorded in an empty barrel. If just a single individual is recording, the mike should be placed head high and one foot or less away from the speaker's mouth. The recording level can be set at a low level if the person is placed near the mike, and that eliminates a lot of the outside noises that might otherwise be picked up. If a person has a breathy voice, he/she should speak across the face of the mike. If you are going to be recording a group of persons, the mike should be placed to favor persons with weaker voices.

By setting up the room in advance and experimenting with microphone placement for a few minutes, you can determine fairly easily the best placement for the microphone and for the person(s) who will be recording. During your experimentation, you will also need to be adjusting the volume (using the Meter), tone, and speed controls so that you are getting the quality recording you need or desire.

Once you are set up, start the machine and rotate the reels at least one full turn. If you do not do this, sometimes you will lose the first few seconds of recorded material. Stop the machine, and then engage the PLAY and RECORD controls simultaneously, and you're ready to record.

It was previously mentioned that it is possible to use a **patch cord** to record material directly from other audio equipment. The advantage of using the patch cord is that you can hear the material being recorded (and thus can monitor quality), but there is no external mike operating. Thus, noises or conversations going on in the same room are not picked up during the recording process.

The patch cord is simply a cord with jacks or alligator clips at each end. One end is connected to the machine which will be playing the original (AUDIO OUTPUT jack). The other end is connected to the machine which will be recording the program (AUDIO INPUT or MIC jack). If the original is being played on a stereo machine, but the recorder is monaural, the patch cord needs a Y-cord at one end so that there is a jack or clip for both stereo output jacks.

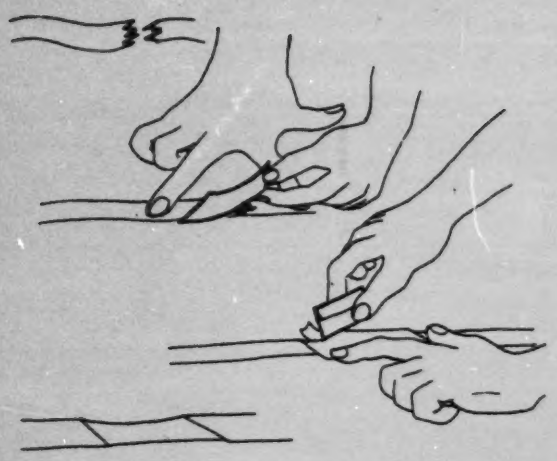
When you are through recording or playing back the tape, turn the volume to zero, rewind the tape, disconnect all cords and replace the recorder in its case.

Maintenance

The recording head should be cleaned periodically using special head cleaner available in aerosol cans, or denatured alcohol. Dip a swab stick into the solution, remove any excess liquid from the swab stick, and **gently** clean the head. For cleaning other parts of the recorder, use denatured alcohol and a clean lintfree cloth.

Should a tape you are using break, it can be repaired fairly easily using a razor blade and a roll of splicing tape. Simply place the two ends of the tape, shiny side up, on a cutting surface. Put the ends together and place a strip of splicing tape over the break. The splicing tape is wider than the magnetic tape so it will overlap. Use a smooth instrument to rub the tape so it is firmly and evenly placed. Use the razor blade to remove the excess tape. Do not cut the splicing tape so that it is even with the recording tape. Instead, cut it slightly in from the edge of the recording tape, creating an hourglass effect.

Splicing a tape or tapes to produce a continuous single program from separately recorded pieces is more a precision operation than a simple repair. If you wish to learn about splicing, you may wish to consult with an audiovisual specialist.



Materials

As with the record player, the materials (prerecorded tapes) for the tape recorder can be located through professional organizations, colleagues, curriculum guides, libraries, audiovisual organizations, journals and periodicals. In addition, the following catalogues contain listings of educational tapes:

- *National Audio Tape Catalog*
  Department of Audiovisual Instruction
  National Education Association
  Washington, D.C.
- *Educators Guide to Free Tapes, Scripts and Transcriptions*
  Educators Progress Service
  Randolph, Wisconsin
- *Harrison Catalog of Recorded Tapes*
  Research, Inc.
  New York, New York
- *Bluebook of Audio Visual Materials*
  Educational Screen and Audiovisual Guide
  Chicago, Illinois

NOTES

The following worksheet is designed to help you become competent in operating the reel-to-reel tape recorder. No one need see this worksheet unless you choose to show it to them, so do not be reluctant to record what actually happens, right or wrong. The sheet is not intended as proof that you did everything perfectly the first time. It is intended to help you to organize your knowledge about the operation of the tape recorder, to help you apply the knowledge to actual equipment, to point out to you where you have gaps in your knowledge, and to help you determine how to fill those gaps. Completed thoughtfully and thoroughly, this sheet should make an excellent reference for you in the future. Read the directions carefully and then complete each of the 18 exercises.

TAPE RECORDER WORKSHEET

Directions: Locate a reel-to-reel tape recorder, a blank audiotape, and a prerecorded educational audiotape. Arrange for the equipment and material to be placed in the room in which you will be working with them. Complete each of the following exercises using the actual equipment and material. Each exercise requires a short response. Please respond fully, but briefly, and make sure you respond to all parts of each item. Do **not** answer simply YES or NO; explain your responses. Should you have any difficulty with an exercise, make a note of that problem.

1. What is the make and model of the tape recorder with which you are working?

2. Is there an operating manual? Does it contain any information that is different from, or was not covered in, the information sheet? If so, briefly describe that information.

3. Open the cover of the tape recorder and remove it if necessary. Use the following checklist to check off the types of controls available on the tape recorder you are working with.

Speed Settings
____1⅞ ips
____3¾ ips
____7½ ips
____15 ips

Movement Controls
____Play
____Rewind
____Fast Forward
____Stop

Sound Controls
____Volume
____Tone (Treble/Bass)
____VU Meter
____Neon Tube

Tracks
____Single
____Dual
____Quarter

4. Describe how the controls are operated (buttons, knobs, levers, etc.). Is there a separate control for each function or are several functions (e.g., play, rewind, stop) on the same control knob?

5. What buttons or devices must be operated (and how) in order to set the machine to record?

6. Is a program indicator provided? Where is it located and how do you reset it to zero?

7. What input/output jacks are provided?

8. Check the prerecorded tape you will be using. What speed has it been recorded at? How many tracks are recorded? Set the tape recorder controls to fit the characteristics of the tape.

9. Based on the characteristics of the tape, can it be played on your tape recorder? Why or why not? (If not, locate either another tape or another tape recorder.)

10. Describe the type of speaker(s): one or two speakers? . . . part of the cover, built into the tape recorder, or separate?

11. Locate the power cord and plug the tape recorder into an outlet. If the speakers are separate, plug them into the speaker jacks on the tape recorder. Describe the location of the stored power cord and the speaker jacks.

12. Turn the machine on and thread the **prerecorded** tape onto the tape recorder. Describe the threading procedure, the controls involved, and the location of these controls.

13. Turn the machine to "Play" and adjust the volume and tone. Describe the controls used to make these adjustments and what each control does.

14. If there are two speakers, move them apart until the sound seems to come from a point between the two speakers. Describe the proper location of the speakers and any controls on the machine which control the amount of sound coming from each speaker.

15. Assume you have a class of 20 students. Arrange the seating, the tape recorder and the speakers as you would if you were using the tape recorder to present information to that group of 20. Start the tape playing and make any necessary adjustments to volume, tone, etc. **NOTE:** At this point, move to the explanation of Part I in the Feedback that follows.

16. Rewind the tape, remove it from the tape recorder, thread the **unrecorded** tape onto the machine, and attach the microphone to the tape recorder. Describe the procedure for attaching the microphone.

17. Experiment with using the machine to record, using your own voice. Try placing the mike in different locations, adjusting the speed control, speaking into the mike from various distances, adjusting the volume and tone, and speaking into the mike loudly and softly. Watch the VU Meter or Neon Tube Indicator if there is one. Rewind and play back your recordings frequently to get feedback on the quality. Document the results of your experimentation in writing (e.g., what caused the best sound reproduction, etc.?).

18. Rewind the tape, remove it, and replace the tape and the tape recorder in their cases. Then move to the explanation of Part II in the Feedback that follows.

Part I: After you have completed the first 15 items on the worksheet, use Part I of the Tape Recorder Operation Checklist, p. 35, to evaluate your work. **Part II:** After you have completed items 16–18, use Part II of the Tape Recorder Operation Checklist, p. 36, to evaluate your work.

TAPE RECORDER OPERATION CHECKLIST

Directions: Place an X in the YES or NO box to indicate whether each item was performed successfully or not.

Name _____

Date _____

Resource Person _____

Part I	Yes	No
When you were handling the tape recorder, you remembered to:		
1. handle the machine without jarring it or bumping it into anything	☐	☐
When you were threading the tape onto the reel-to-reel recorder, you:		
2. used a take-up reel that was as big or bigger than the feeder reel	☐	☐
3. made sure the dull side of the tape was against the recording head	☐	☐
4. made sure the tape was firmly against the automatic shut-off feature, if the recorder has such a feature	☐	☐
5. made sure the tape was firmly secured around the take-up reel by rotating the take-up reel by hand	☐	☐
6. made sure the reels were locked into place on the spindles through whatever method is provided with the machine	☐	☐
When you were operating the recorder, you remembered to:		
7. use the "stop" control whenever you were changing functions (e.g., moving from "play" to "rewind")	☐	☐
The tape recorder, speakers, and room are adjusted and arranged for the group of 20 so that:		
8. the tape recorder is at the front of the room	☐	☐
9. the speakers are at the ear level of the members of the class	☐	☐
10. if there is one speaker, it is placed slightly off-center so the sound is directed diagonally across the room; if there are two speakers, they are placed so that the sound seems to come from between them	☐	☐
The sound:		
11. is clear and undistorted	☐	☐
12. is loud enough to be heard by all members of the class	☐	☐
13. has a pleasant tone	☐	☐

(Return to the worksheet and complete items 16–18)

Part II

	Yes	No
In threading and recording the unrecorded tape, you:		
14. unwound and discarded a full turn of tape if the tape you were using was new and still sealed	☐	☐
15. were able to get good sound reproduction through experimenting. (If you were unable to get good sound at all, check with your resource person.)	☐	☐
In returning the tape and tape recorder to their cases, you:		
16. stopped the machine as soon as the tape was rewound, so that the end of the tape didn't get damaged by hitting against the machine	☐	☐
17. returned all controls to their original or "off" positions	☐	☐
18. unplugged the machine, the speaker cords, and the microphone	☐	☐
19. returned all cords and the microphone to their storage areas	☐	☐

LEVEL OF PERFORMANCE: All items should receive YES responses. If any item receives a NO response, correct that condition using the actual equipment and materials. If you have trouble correcting the condition, check with your resource person or someone with expertise in the area of audiovisuals.

You may wish to contact your resource person, or someone else you or your resource person may know of with expertise in the area of audiovisuals. This person could discuss with you special techniques or helpful hints that can be of use to you when you work with the tape recorder.

You may wish to check into the latest advances in tape recorders. You may also wish to identify educational audiotapes that are currently available. If there is an audiovisual equipment dealership in your vicinity, you may wish to visit them and look over their equipment, or to make arrangements to have one of their salespersons talk to you. If you cannot make such a visit, you could write to one or more of the major manufacturers of educational tapes and tape recorders, asking for catalogues.

Learning Experience IV

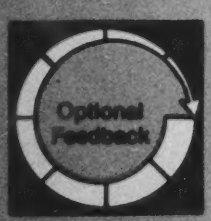
OVERVIEW

After completing the required reading, present information with prerecorded tapes in a practice situation.

You will be reading the information sheet, Using the Tape Recorder as an Instructional Device, pp. 39–41.

You will be selecting an objective in your occupational specialty that lends itself to the use of an audiotape.

You will be selecting, modifying, or developing a lesson plan designed to achieve that objective using a prerecorded audiotape(s).



You may wish to have your resource person review the adequacy of your plan.

You will be obtaining or recording the necessary tape(s), and making arrangements to secure the necessary equipment.

You may wish to arrange through your resource person to visit a classroom in which a teacher experienced in the use of audiotapes is presenting information using an audiotape and a tape recorder.

You will be presenting your lesson to your resource person.

Your competency in presenting information with audiotape(s) and a tape recorder will be evaluated by your resource person, using the Presentation Checklist: Audiotapes, pp. 43–44.

Activity

For information describing the general and specific uses of audiotapes and tape recorders in presenting information, and explaining the procedures for their classroom use, read the following information sheet:

USING THE TAPE RECORDER AS AN INSTRUCTIONAL DEVICE

The tape recorder, used properly, can be one of the more versatile pieces of audiovisual equipment available to you. However, before attempting to use the tape recorder, you should be aware of its advantages, disadvantages, and recommended procedures for using it as a classroom tool.

Advantages

A large variety of tape recorders is available ranging in price from about $30.00 to several hundred dollars. The newer cassette recorders are lightweight, portable, and reasonable enough in price that most schools and many teachers and students own cassette recorders. Such equipment is, therefore, readily accessible, and most people know how to operate it. Even without previous experience, the cassette recorder is so simple to operate that even a small child can do it. Since the cassette tapes are enclosed in a plastic case, they are easy to store and handle, and difficult to damage.

Commercial audiotapes designed for vocational education coursework are available on a limited basis. For example, you can probably purchase tapes which contain dictation exercises for business and office education, or which are coordinated with slides or filmstrips. However, the real advantage of the tape recorder is that it is so simple and so inexpensive for the teacher or the students to produce their own tapes. With portable cassette equipment, audiotapes can be produced just about anywhere, and at anytime. In addition, once a tape is made, its content is available for review by the class, by another class, or by individuals. When the content is no longer needed, the tape can be easily erased and reused.

Disadvantages

When using a large reel-to-reel recorder, one possible disadvantage is that it appears complicated to operate. In fact, it is not that complicated, but the appearance can be deceptive. Another limitation of the large reel-to-reel recorder is its size. It is not as versatile as the cassette recorder in that it is not as portable. For instance, assume you were going to take the class on a field trip. It would be a simple matter to bring along a cassette recorder just in case something comes up that is worth recording. This is not true of the large reel-to-reel recorder.

Another potential problem with reel-to-reel recorders is that different models vary in the number of tracks and number of speeds available for use. This means that a tape recorded on one machine may not play back correctly on another machine.

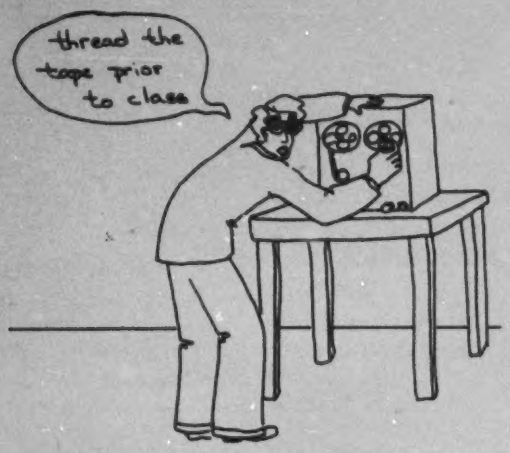
The cassette recorder, too, has some disadvantages. The quality of reproduction is not as high as with a more expensive reel-to-reel recorder, but it is adequate for most classroom needs. Also, unless the tape recorder has some sort of program indicator, it is often difficult to locate a particular item on a tape.

Unlike records or slides, tapes can be accidentally erased. This can generally be avoided if each tape is clearly marked as to its contents. In that way, it would be more difficult to start recording something new on a tape containing a key presentation. With cassette tapes, this can be easily avoided since the plastic case has two places where holes can be punched out to prevent the tape from being erased.

Classroom Procedures

If, as a part of a lesson, you are planning to play back an audiotape which has been prerecorded commercially or locally (i.e., teacher-made, student-made, etc.), the classroom procedures are

nearly identical to those described for the record player on pp. 17–19. The only critical difference between the procedures for the tape recorder and the procedures for the record player is that with the reel-to-reel tape recorder, you should thread the tape prior to class.



If you are planning to require students to operate the taping equipment or to participate in recording a tape, you need to explain thoroughly how to operate the equipment and/or how to speak so as to get the best quality of sound reproduction.

Specific Applications

If students are going to be discussing a critical subject, if a panel discussion is to be conducted, if a student is to make a presentation, or if a guest speaker will be visiting the class, a tape recording can be made of these activities. A well-conducted discussion or presentation can be reused in another class, used as a basis for class discussion, or used on an individual basis. Taped presentations or discussions can also be replayed for evaluation purposes. The material on the tape or the performance and competency of the presenter(s) can be evaluated by the teacher or other students or the presenters themselves.

Audiotapes can be made of significant events which would not otherwise be accessible to the students. You could have a student who is attending a student vocational organization convention tape some of the key presentations to share with other members of the local organization. You could have individual students interview persons working in occupations related to their coursework, and tape those interviews to share with the class. A person with expertise relative to a concept you are trying to teach may not be able to come to the school to make a presentation. However, this expert could send a taped presentation instead. Again, the advantage of such tapes is that they can be stored and reused both with individuals and with groups.

If a teacher is presenting background or introductory material which forms the basis for an entire unit of instruction, this presentation can be taped so that it is available to students who are absent or who need review.

Teacher-made tapes can often give the teacher that "third hand" that's always needed. Students working on individualized activities can be prepared for, or guided through, those activites with taped explanations or instructions recorded by the teacher. Worksheets or programmed instructional materials or slides or filmstrips can be paired with teacher-made tapes, allowing students to work with less direct teacher assistance. This gives the teacher more class time or laboratory time to work with other individuals or small groups in areas that require more direct teacher assistance.

Audiotapes can be of great assistance to students who have reading difficulties. A student who would ordinarily have difficulty describing in writing the progress he/she is making with a project, might be able to explain his/her progress clearly on tape. Likewise, a student who has trouble working independently because so much of the individualized instruction relies on the printed word, might function well if the printed matter were accompanied by a tape.

This is not to say that the student should be allowed to avoid reading and writing completely. The student should get practice and assistance in that area. The point is that it is not entirely fair to rate a student's performance in a particular area on the basis of his/her inability to write coherently, nor is it fair to allow him/her to miss information completely because it was given in written form only. If a competency involves the ability to write, then it is fair to grade that ability. However, if the competency itself does not involve writing skills, then allowing the student to work with a tape is an excellent device.

Finally, audiotapes are a valuable tool for student self-evaluation or for group evaluation during leadership training activities (e.g., public speaking, conducting meetings, presenting reasons for placings in judging contests, preparing to present awards and recognitions, preparing for degree ceremonies, etc.).

Select a student performance objective in your occupational specialty which could be achieved, at least partially, by using a audiotape. (In a real world situation, you start with an objective and then select the most appropriate materials and/or teaching methods. In this practice situation, however, you need to select an objective that lends itself to using an audiotape.)

Prepare a detailed lesson plan which includes the use of an audiotape. In your plan, explain what tape(s) will be needed, how it will be used, and when. Instead of developing a lesson plan, you may select a lesson plan that you have developed previously, and adapt that plan so that it includes the use of an audiotape.

You may wish to have your resource person review the adequacy of your plan. He/she could use the Teacher Performance Assessment Form in Module B–4, *Develop a Lesson Plan*, as a guide.

Based on your lesson plan, select and obtain the tape(s) you will need to make your presentation. Also, arrange to have the appropriate type of tape recorder (based on the type of tape you will be using) available when you make your presentation.

Before presenting your lesson, you may wish to arrange through your resource person to observe a lesson involving the use of an audiotape which is being presented by a vocational teacher in your service area who is experienced in using this technique.

In a simulated classroom situation, present your lesson to your resource person. Your resource person will serve two functions: (1) he/she will role-play a student to whom you are presenting the lesson, and (2) he/she will evaluate your performance.

Give your resource person the Presentation Checklist: Audiotapes, pp. 43–44, before making your presentation in order to ensure that he/she knows what to look for in your lesson.

PRESENTATION CHECKLIST: AUDIOTAPES

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Name _____

Date _____

Resource Person _____

	LEVEL OF PERFORMANCE			
	N/A	No	Partial	Full
The teacher:				
1. arranged the physical setting in advance in a way that would ensure that all students could hear the presentation clearly	☐	☐	☐	☐
2. had equipment and materials assembled in advance	☐	☐	☐	☐
3. set up equipment and threaded the tape according to manufacturer's recommendations	☐	☐	☐	☐
4. prechecked the equipment and preset tone, volume, etc.	☐	☐	☐	☐
5. adjusted the sound so that it met the following criteria:				
a. clear and undistorted	☐	☐	☐	☐
b. loud enough to be heard by all members of the class	☐	☐	☐	☐
c. pleasant tone	☐	☐	☐	☐
6. used a tape which met the following criteria:				
a. content was at students' comprehension level	☐	☐	☐	☐
b. tape aided in meeting the objective(s) of the lesson	☐	☐	☐	☐
c. content was motivational and interesting	☐	☐	☐	☐
d. content was of good quality (e.g., well organized, clear, logical, error free, and up to date)	☐	☐	☐	☐
e. recorded sound was of good quality	☐	☐	☐	☐
f. tape was in good condition	☐	☐	☐	☐
7. reviewed listening skills with students before playing the tape	☐	☐	☐	☐
8. prepared students adequately for the tape (e.g., raised key questions, defined terms, etc.)	☐	☐	☐	☐

	N/A	No	Partial	Full
9. presented the tape at a logical point in the lesson	☐	☐	☐	☐
10. had the tape set so that it started at the right place when turned to play during the lesson	☐	☐	☐	☐
11. stopped the tape as soon as the selection had ended	☐	☐	☐	☐
12. summarized (or had class members summarize) the tape content	☐	☐	☐	☐
13. obtained student feedback on students' understanding of the tape	☐	☐	☐	☐
14. obtained student feedback on students' evaluation of the tape ..	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive FULL, or N/A responses. If any item receives a NO, or PARTIAL response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

Learning Experience V

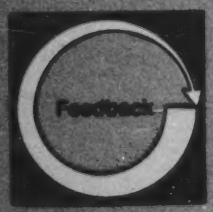
FINAL EXPERIENCE

In an actual school situation,* present information with audio recordings.

As you plan your lessons, decide when records and audiotapes could be used effectively to aid you in meeting the lesson objectives. Based on those decisions, present information with audio recordings. This will include—

- deciding if you wish to teach a single lesson which incorporates the use of both records and audiotapes; or if you wish to teach two lessons, one using a record and one using an audiotape
- selecting, modifying, or developing a lesson plan(s) which includes the use of these techniques
- selecting, obtaining, or preparing the necessary materials
- securing the necessary equipment
- presenting the lesson(s) to the class

NOTE: Your resource person may want you to submit your written lesson plan(s) to him/her for evaluation before you present your lesson(s). It may be helpful for your resource person to use the TPAF from Module B–4, *Develop a Lesson Plan*, to guide his/her evaluation.



Arrange in advance to have your resource person observe your lesson presentation(s).

Your total competency will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 47–49.

Based upon the criteria specified in this assessment instrument, your resource person will determine whether you are competent in presenting information with audio recordings.

*For a definition of "actual school situation," see the inside back cover.

NOTES

TEACHER PERFORMANCE ASSESSMENT FORM

Present Information with Audio Recordings (C–26)

Name _____

Date _____

Resource Person _____

Directions: Indicate the level of the teacher's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

	LEVEL OF PERFORMANCE					
	N/A	None	Poor	Fair	Good	Excellent
The teacher:						
1. arranged the physical setting in advance in a way that would ensure that all students could hear the presentation clearly	☐	☐	☐	☐	☐	☐
2. had equipment and materials assembled in advance	☐	☐	☐	☐	☐	☐
3. set up equipment and placed record on the turntable according to manufacturer's recommendations	☐	☐	☐	☐	☐	☐
4. prechecked the equipment and preset tone, volume, etc.	☐	☐	☐	☐	☐	☐
5. adjusted the sound so that it met the following criteria:						
a. clear and undistorted	☐	☐	☐	☐	☐	☐
b. loud enough to be heard by the class	☐	☐	☐	☐	☐	☐
c. pleasant tone	☐	☐	☐	☐	☐	☐
6. used a record which met the following criteria:						
a. content was at students' comprehension level	☐	☐	☐	☐	☐	☐
b. record aided in meeting the objective(s) of the lesson	☐	☐	☐	☐	☐	☐
c. content was motivational and interesting	☐	☐	☐	☐	☐	☐
d. content was of good quality (e.g., well organized, clear, logical, error free, and up to date)	☐	☐	☐	☐	☐	☐
e. recorded sound was of good quality	☐	☐	☐	☐	☐	☐
f. record was in good condition						
7. reviewed listening skills with students before playing the record	☐	☐	☐	☐	☐	☐
8. prepared students adequately for the record (e.g. raised key question, defined terms, etc.)	☐	☐	☐	☐	☐	☐
9. presented the record at a logical point in the lesson	☐	☐	☐	☐	☐	☐

	N/A	None	Poor	Fair	Good	Excellent
10. placed the needle at the proper point on the record on the first try without allowing the needle to scratch the record	☐	☐	☐	☐	☐	☐
11. removed the tone arm from the record as soon as the record (or record section) was finished without allowing the needle to scratch the record	☐	☐	☐	☐	☐	☐
12. summarized (or had class members summarize) the record content	☐	☐	☐	☐	☐	☐
13. obtained student feedback on students' understanding of the record	☐	☐	☐	☐	☐	☐
14. obtained student feedback on students' evaluation of the record	☐	☐	☐	☐	☐	☐

Audiotapes

The Teacher:

15. arranged the physical setting in advance in a way that would ensure that all students could hear the presentation clearly	☐	☐	☐	☐	☐	☐
16. had equipment and materials assembled in advance	☐	☐	☐	☐	☐	☐
17. set up equipment and threaded the tape according to manufacturer's recommendations	☐	☐	☐	☐	☐	☐
18. prechecked the equipment and preset tone, volume, etc.	☐	☐	☐	☐	☐	☐
19. adjusted the sound so that it met the following criteria: a. clear and undistorted	☐	☐	☐	☐	☐	☐
b. loud enough to be heard by all members of the class	☐	☐	☐	☐	☐	☐
c. pleasant tone	☐	☐	☐	☐	☐	☐

	N/A	None	Poor	Fair	Good	Excellent
20. used a tape which met the following criteria: a. content was at students' comprehension level	☐	☐	☐	☐	☐	☐
b. tape aided in meeting the objective(s) of the lesson	☐	☐	☐	☐	☐	☐
c. content was motivational and interesting	☐	☐	☐	☐	☐	☐
d. content was of good quality (e.g., well organized, clear, logical, error free, and up to date)	☐	☐	☐	☐	☐	☐
e. recorded sound was of good quality	☐	☐	☐	☐	☐	☐
f. tape was in good condition.						
21. reviewed listening skills with students before playing the tape	☐	☐	☐	☐	☐	☐
22. prepared students adequately for the tape (e.g., raised key questions, defined terms, etc.)	☐	☐	☐	☐	☐	☐
23. presented the tape at a logical point in the lesson	☐	☐	☐	☐	☐	☐
24. had the tape set so that it started at the right place when turned to play during the lesson	☐	☐	☐	☐	☐	☐
25. stopped the tape as soon as the selection had ended .	☐	☐	☐	☐	☐	☐
26. summarized (or had class members summarize) the tape content	☐	☐	☐	☐	☐	☐
27. obtained student feedback on students' understanding of the tape	☐	☐	☐	☐	☐	☐
28. obtained student feedback on students' evaluation of the tape.	☐	☐	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

ABOUT USING THE CENTER'S PBTE MODULES

Organization

Each module is designed to help you gain competency in a particular skill area considered important to teaching success. A module is made up of a series of learning experiences, some providing background information, some providing practice experiences, and others combining these two functions. Completing these experiences should **enable** you to achieve the **terminal** objective in the final learning experience. The final experience in each module always requires you to demonstrate the skill in an actual school situation when you are an intern, a student teacher, or an inservice teacher.

Procedures

Modules are designed to allow you to individualize your teacher education program. You need to take only those modules covering skills which you do not already possess. Similarly, you need not complete any learning experience within a module if you already have the skill needed to complete it. Therefore, before taking any module, you should carefully review (1) the Introduction, (2) the Objectives listed on p. 4, (3) the Overviews preceding each learning experience, and (4) the Final Experience. After comparing your present needs and competencies with the information you have read in these sections, you should be ready to make one of the following decisions:

- that you do not have the competencies indicated, and should complete the entire module
- that you are competent in one or more of the enabling objectives leading to the final learning experience, and thus can omit that (those) learning experience(s)
- that you are already competent in this area, and ready to complete the final learning experience in order to "test out"
- that the module is inappropriate to your needs at this time

When you are ready to take the final learning experience **and** have access to an actual school situation, make the necessary arrangements with your resource person. If you do not complete the final experience successfully, meet with your resource person and arrange (1) to repeat the experience, or (2) complete (or review) previous sections of the module or other related activities suggested by your resource person before attempting to repeat the final experience.

Options for recycling are also available in each of the learning experiences preceding the final experience. Any time you do not meet the minimum level of performance required to meet an objective, you and your resource person may meet to select activities to help you reach competency. This could involve (1) completing parts of the module previously skipped; (2) repeating activities; (3) reading supplementary resources or completing additional activities suggested by the resource person; (4) designing your own learning experience; or (5) completing some other activity suggested by you or your resource person.

Terminology

Actual School Situation . . . refers to a situation in which you are actually working with, and responsible for, secondary or post-secondary vocational students in a real school. An intern, a student teacher, or an inservice teacher would be functioning in an actual school situation. If you do **not** have access to an actual school situation when you are taking the module, you can complete the module **up to** the final learning experience. You would then do the final learning experience later; i.e., when you have access to an actual school situation.

Alternate Activity or Feedback . . . refers to an item or feedback device which may **substitute** for required items which, due to special circumstances, you are unable to complete.

Occupational Specialty . . . refers to a specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity).

Optional Activity or Feedback . . . refers to an item which is not required, but which is designed to **supplement** and enrich the required items in a learning experience.

Resource Person . . . refers to the person in charge of your educational program; the professor, instructor, administrator, supervisor, or cooperating/supervising/classroom teacher who is guiding you in taking this module.

Student . . . refers to the person who is enrolled and receiving instruction in a secondary or post-secondary educational institution.

Vocational Service Area . . . refers to a major vocational field: agricultural education, business and office education, distributive education, health occupations education, home economics education, industrial arts education, technical education, or trade and industrial education.

You or the Teacher . . . refers to the person who is taking the module.

Levels of Performance for Final Assessment

N/A . . . The criterion was not met because it was **not applicable** to the situation.
None . . . **No attempt** was made to meet the criterion, although it was relevent.
Poor . . . The teacher is unable to perform this skill or has only **very limited ability** to perform it.
Fair . . . The teacher is unable to perform this skill in an acceptable manner, but has **some ability** to perform it.
Good . . . The teacher is able to perform this skill in an **effective** manner.
Excellent . . . The teacher is able to perform this skill in a **very effective** manner.

Titles of The Center's Performance-Based Teacher Education Modules

A–1 Prepare for a Community Survey
A–2 Conduct a Community Survey
A–3 Report the Findings of a Community Survey
A–4 Organize an Occupational Advisory Committee
A–5 Maintain an Occupational Advisory Committee
A–6 Develop Program Goals and Objectives
A–7 Conduct an Occupational Analysis
A–8 Develop a Course of Study
A–9 Develop Long-Range Program Plans
A–10 Conduct a Student Follow-Up Study
A–11 Evaluate Your Vocational Program

Category B: Instructional Planning

B–1 Determine Needs and Interests of Students
B–2 Develop Student Performance Objectives
B–3 Develop a Unit of Instruction
B–4 Develop a Lesson Plan
B–5 Select Student Instructional Materials
B–6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

C–1 Direct Field Trips
C–2 Conduct Group Discussions, Panel Discussions, and Symposiums
C–3 Employ Brainstorming, Buzz Group, and Question Box Techniques
C–4 Direct Students in Instructing Other Students
C–5 Employ Simulation Techniques
C–6 Guide Student Study
C–7 Direct Student Laboratory Experience
C–8 Direct Students in Applying Problem-Solving Techniques
C–9 Employ the Project Method
C–10 Introduce a Lesson
C–11 Summarize a Lesson
C–12 Employ Oral Questioning Techniques
C–13 Employ Reinforcement Techniques
C–14 Provide Instruction for Slower and More Capable Learners
C–15 Present an Illustrated Talk
C–16 Demonstrate a Manipulative Skill
C–17 Demonstrate a Concept or Principle
C–18 Individualize Instruction
C–19 Employ the Team Teaching Approach
C–20 Use Subject Matter Experts to Present Information
C–21 Prepare Bulletin Boards and Exhibits
C–22 Present Information with Models, Real Objects, and Flannel Boards
C–23 Present Information with Overhead and Opaque Materials
C–24 Present Information with Filmstrips and Slides
C–25 Present Information with Films
C–26 Present Information with Audio Recordings
C–27 Present Information with Televised and Videotaped Materials
C–28 Employ Programmed Instruction
C–29 Present Information with the Chalkboard and Flip Chart

Category D: Instructional Evaluation

D–1 Establish Student Performance Criteria
D–2 Assess Student Performance: Knowledge
D–3 Assess Student Performance: Attitudes
D–4 Assess Student Performance: Skills
D–5 Determine Student Grades
D–6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

E–1 Project Instructional Resource Needs
E–2 Manage Your Budgeting and Reporting Responsibilities
E–3 Arrange for Improvement of Your Vocational Facilities
E–4 Maintain a Filing System
E–5 Provide for Student Safety
E–6 Provide for the First Aid Needs of Students
E–7 Assist Students in Developing Self-Discipline
E–8 Organize the Vocational Laboratory
E–9 Manage the Vocational Laboratory

Category F: Guidance

F–1 Gather Student Data Using Formal Data-Collection Techniques
F–2 Gather Student Data Through Personal Contacts
F–3 Use Conferences to Help Meet Student Needs
F–4 Provide Information on Educational and Career Opportunities
F–5 Assist Students in Applying for Employment or Further Education

Category G: School-Community Relations

G–1 Develop a School-Community Relations Plan for Your Vocational Program
G–2 Give Presentations to Promote Your Vocational Program
G–3 Develop Brochures to Promote Your Vocational Program
G–4 Prepare Displays to Promote Your Vocational Program
G–5 Prepare News Releases and Articles Concerning Your Vocational Program
G–6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
G–7 Conduct an Open House
G–8 Work with Members of the Community
G–9 Work with State and Local Educators
G–10 Obtain Feedback about Your Vocational Program

Category H: Student Vocational Organization

H–1 Develop a Personal Philosophy Concerning Student Vocational Organizations
H–2 Establish a Student Vocational Organization
H–3 Prepare Student Vocational Organization Members for Leadership Roles
H–4 Assist Student Vocational Organization Members in Developing and Financing a Yearly Program of Activities
H–5 Supervise Activities of the Student Vocational Organization
H–6 Guide Participation in Student Vocational Organization Contests

Category I: Professional Role and Development

I–1 Keep Up-to-Date Professionally
I–2 Serve Your Teaching Profession
I–3 Develop an Active Personal Philosophy of Education
I–4 Serve the School and Community
I–5 Obtain a Suitable Teaching Position
I–6 Provide Laboratory Experiences for Prospective Teachers
I–7 Plan the Student Teaching Experience
I–8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

J–1 Establish Guidelines for Your Cooperative Vocational Program
J–2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
J–3 Enroll Students in Your Co-Op Program
J–4 Secure Training Stations for Your Co-Op Program
J–5 Place Co-Op Students on the Job
J–6 Develop the Training Ability of On-the-Job Instructors
J–7 Coordinate On-the-Job Instruction
J–8 Evaluate Co-Op Students' On-the-Job Performance
J–9 Prepare for Students' Related Instruction
J–10 Supervise an Employer-Employee Appreciation Event

RELATED PUBLICATIONS

Student Guide to Using Performance-Based Teacher Education Materials
Resource Person Guide to Using Performance-Based Teacher Education Materials
Guide to the Implementation of Performance-Based Teacher Education

For information regarding availability and prices of these materials contact—

AAVIM
American Association for Vocational Instructional Materials
120 Engineering Center • Athens, Georgia 30602 • (404) 542-2586